This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (**Original**) A process of increasing bone density in a mammalian patient suffering from a pathological condition in which bone density is decreased which comprises inhibiting the formation of a tertiary complex of IL-11, IL-11R, and gp130.

2. (**Original**) The process of claim 1 which comprises administering to the patient an effective amount of a substance which inhibits, *in vivo*, the formation of a tertiary complex of IL-11, IL-11R, and gp130.

3. (**Original**) The process of claim 2 wherein the pathological condition is postmenopausal bone loss.

4. (**Original**) The process of claim 2 wherein the substance is a mutant IL-11R.

5. (**Original**) The process of claim 4 wherein the substance is a mutant IL-11R with at least one mutation in its gpl30 binding region.

6. (**Original**) The process of claim 5 wherein the substance is a mutant IL-11R having at least one of the following mutations: D282 → G282, A283 → D283, G286 → D286, H289 → Y289, and V291 → L291.

7. (**Original**) The process of claim 6 wherein the substance is a mutant IL-11R having the mutation H289 → Y289.

8. (**Original**) The process of claim 4, wherein the substance is a soluble mutant IL-11R.

9. (**Original**) The process of claim 8 wherein the mutant IL-11R is a human IL-11R.

10. (**Original**) The process of claim 2 wherein the substance is an anti IL-11 antibody.

11. (**Original**) The process of claim 2 wherein the substance is an IL-11 binding peptide.

12. **(Original)** The process of claim 11 wherein the substance is an IL-11 binding peptide having an amino acid sequence which specifically binds IL-11 in the region normally bound by IL-11R.

13. **(Original)** The process of claim 12 wherein the substance is a peptide comprising the sequence Arg Arg Leu Arg Ala Ser Trp.

14. **(Original)** The process of claim 2 wherein the substance is a small molecule.

15. **(Original)** The process of claim 2 wherein the substance is an IL-11 antagonist.

16. **(Original)** The process of claim 2 wherein the substance is an IL-11R binding peptide.

17. **(Original)** The process of claim 2 wherein the substance is an anti IL-11R antibody which inhibits interactions between IL-11 and the IL-11R.

18. **(Original)** The process of claim 2 wherein the substance is an anti IL-11R antibody which inhibits interactions between IL-11R and gp130.

19. **(Original)** The process of claim 2 wherein the substance is an effective amount of transcribable genetic material which causes inhibition of the formation of the tertiary complex of IL-11, IL-11R, and gp130.

20. **(Original)** The process of claim 19 wherein the transcribable genetic material encodes an RNA sequence capable of inhibiting the translation of a component necessary to the formation of the IL-11 / IL-11R / gp130 tertiary complex.

21. **(Original)** The process of claim 20 wherein the transcribable genetic material comprises DNA encoding an RNA sequence complementary to IL-11 mRNA.

22. **(Original)** The process of claim 20 wherein the transcribable genetic material comprises DNA encoding an RNA sequence complementary to IL-11R mRNA.

23. **(Original)** The process of claim 20 wherein the transcribable genetic material comprises DNA encoding an RNA sequence complementary to gp130 mRNA.

24. **(Original)** The process of claim 19 wherein the transcribable genetic material comprises DNA encoding an amino acid sequence capable of inhibiting the formation of the IL-11 / IL-11R, gp130 tertiary complex.

25. **(Original)** The process of claim 24 wherein the transcribable genetic material encodes an IL-11R mutated to inhibit binding to gp130.

26. **(Original)** The process of claim 24 wherein the transcribable genetic material encodes an IL-11 binding peptide.

27. **(Original)** The process of claim 19, wherein the level of transcription of the transcribable genetic material is dependant on the concentration of an inducing compound.

28. **(Original)** The process of claim 1, in which the patient is a human.

29-33. **(Canceled)**

34. **(Original)** A composition of matter comprising an IL-11 binding peptide.

35. **(Original)** The composition of claim 34 wherein the IL-11 binding peptide comprises the sequence Arg Arg Leu Arg Ala Ser Trp.

36. **(Original)** The composition of claim 34 wherein the IL-11 binding peptide comprises the sequence Arg Arg Leu His Ala Ser Trp.

37. **(Original)** The composition of claim 34 wherein the IL-11 binding peptide comprises the sequence Arg Arg Leu X Ala Ser Trp, and X is a basic amino acid.

38. **(Original)** The composition of claim 34 wherein the IL-11 binding peptide comprises the sequence Ser Ile Leu Arg Pro Asp Pro Pro GIn Gly Leu Arg Val Glu Ser Val Pro Gly Tyr Pro.

39. **(Original)** The composition of claim 34 wherein the IL-11 binding peptide comprises the sequence Ser Ile Leu Arg Pro Asp Pro Pro Gln Gly Leu Arg Val Glu Ser Val Pro Ser Tyr Pro.

40. (**Original**) Use of the peptide of claims 34 in reducing the formation of a tertiary complex of IL-11, IL-11R and gp130.

41. (**Original**) Use of the peptide of claim 34 in the purification of IL-11.

42. (**Original**) Use of the peptide of claim 34 in the depletion of IL-11 from a solution.

43. (**Original**) A composition of matter for the selective binding of IL-11 comprising the peptide of claim 34 suitably immobilized on an appropriate substrate.

44. (**Original**) A composition of matter comprising an IL-11R binding peptide.

45. (**Original**) Use of an antibody which specifically bins the IL-11R and blocks interactions between IL-11 and IL-11R in the preparation of a medicament for use in increasing bone density in a mammalian patient.

46. (**Original**) Use of an antibody which specifically bins the IL-11R and blocks interactions between gp130 and IL-11R in the preparation of a medicament for use in increasing bone density in a mammalian patient.

47. (**Original**) The use of the TRAP assay in identifying IL-11 antagonists.

48. (**Original**) The use of the bone marrow formation assay in identifying IL-11 antagonists.

49. (**Original**) A process of increasing bone formation while decreasing bone resorption in a mammalian patient, which comprises inhibiting the formation of a tertiary complex of IL-11, IL-11R and gp130.